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$$(2x+1)(x^2-4x-3) = \frac{2xx^2 + 2x(-4x) + 2x(-3)}{+1(1x^2) + 1(-4x) + 1(-3)}$$

$$2x^3 - \underline{8x^2} - \underline{6x} + x^2 - \underline{4x} - 3$$

$$\underline{2x^3 - 7x^2 - 10x - 3}$$

$$(23) (x-5)(-3x^3-4x-1)$$

$$-3x^4 - 4x^2 - \underline{x} + 15x^3 + \underline{20x} + 5$$

$$-3x^4 + 15x^3 - 4x^2 + 19x + 5$$

$$(27) \quad (2x-4)(x+1)^2 = \underline{(2x-4)(x+1)(x+1)}$$

$$(2x-4)(x+1) = 2x^2 + 2x - 4x - 4 =$$

$$2x^2 - 2x - 4$$

$$(x+1)(2x^2 - 2x - 4)$$

$$2x^3 - \cancel{2x^2} - 4x + \cancel{2x^2} - 2x - 4 =$$

$$2x^3 - 6x - 4$$

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$$x^3 - 2x^2 - 3x = x \times x - 2x \times -3x =$$

$$= x(x^2 - 2x - 3) = x(x+1)(x-3)$$

$$(-3) = -1 \cdot 3$$

$$\underline{-1 + 3 = 2}$$

$$(-3) = 1 \cdot (-3)$$

$$1 + -3 = \underline{-2}$$

$$(43) \quad \underline{x^3 - 3x^2 + 4x - 12} = (x-3)(x^2+4)$$

$$\underline{x^3} - 3\underline{xx} = x^2(x-3)$$

$$\underline{4x} - \underline{4 \cdot 3} = 4(x-3)$$

$$(49) \quad \underline{x^3 + x^2} + \underline{\underline{2 + 2x}} = (x+1)(x^2+2)$$

$$x^3 + 1 \cdot x^2 + 2 \cdot 1 + 2x$$

$$\underline{xxx} + \underline{1xx} = x^{\text{or}}(x+1)$$

$$\underline{2 \cdot 1} + \underline{2x} = 2(x+1)$$

$$x = 1 \cdot x$$

$$x^2 = 1 \cdot x^2$$

$$(48) \quad \underline{x^3 + 2x^2} + \underline{14x + 7x^2} = (x+2)(x^2+7x) =$$

$$x \underline{x} x + 2 \underline{x} x = x^2(x+2)$$

$$2 \cdot \underline{7x} + 7 \underline{x} x = 7x(x+2)$$

$$= x(x+2)(x+2)$$